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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,215

09/22/2006

Andrei Radulescu

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

DANG, KHANH

ART UNIT

PAPER NUMBER

2111

MAIL DATE

DELIVERY MODE

02/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,215	RADULESCU ET AL.	
	Examiner	Art Unit	
	Khanh Dang	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/22/2006 Preliminary Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20070418</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6 are directed to an apparatus. However, the essential structural cooperative relationship(s) between the so-called “transaction abortion unit” and “processing modules,” and “interconnect means” have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

MPEP 2172.01 requires that relationships between elements recited in the claims must be specified. Specifically, MPEP 2172.02 requires interrelation and structural relationships between essential elements in the claims. Therefore, it is the Examiner’s position that the claimed elements, as defined in the originally filed specification and as identified above, are essential elements to the claimed invention. Since they are essential elements as defined in the originally filed specification, their structural cooperative relationships must be provided in the claims. Further, it is also the Examiner’s position that the claimed elements, as identified above, function simultaneously, are directly functionally related, directly inter-cooperate, and/or serve independent purposes, as evidenced from the originally filed specification.

If Applicants disagree with the Examiner that the above identified elements, as defined by the originally filed specification, are essential elements to the claimed

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invention, and that the above identified elements are directly functionally related, directly inter-cooperate, and/or serve independent purposes, it is requested that Applicants provide evidences showing that the identified elements are not essential elements to the claimed invention, do not function simultaneously, are not directly functionally related, do not directly inter-cooperate, and/or do not serve independent purposes; and state on the record that this is the case.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Okazawa et al. (Okazawa, 5,276,818).

As broadly drafted, claims 1, 7, and 8 do not define any step that differs from Okazawa.

With regard to claim 1, Okazawa discloses an integrated circuit having a plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality

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of processing modules (M, S) and for enabling a device- level communication based on transactions between said plurality of processing modules (M, S), wherein at least one first processing module (M) issues at least one transaction towards at least one second processing module (S) (as shown in at least Fig. 2, Okazawa discloses a plurality of processing modules 202 and a bus system for coupling the plurality of modules and enabling communication between modules. See at least column 9, line 45 to column 10, line 22) comprising: at least one transaction abortion unit (TAU) for aborting at least one transaction issued from said first module by receiving an abort request (abt) issued by said first module (M), by initiating a discard of said at least one transaction to be aborted, and by issuing a response (abt_ack) indicating the success/failure of the requested transaction abortion (Okazawa also discloses that a master can issue an abort signal to abort or stop a burst transfer to other device 202-1, the bus controller SBUSC then delivers an abort acknowledgement acknowledging the data transfer is terminated. See at least column 4, lines 26-51; column 21, lines 3-21; and claim 1).

With regard to claims 7 and 8, see discussion above regarding claim 1, since the subject matter represented by claims 7 and 8 has already been addressed.

Claims 1-3, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by “Asynchronous Interconnection and Interfacing of Intellectual Property Cores in the Design of System-On-Chip” by Jun Xu (hereinafter Jun Xu).

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Jun Xu discloses Integrated circuit having a plurality of processing modules (M, S) and an interconnect means (N) for coupling said plurality of processing modules (M, S) and for enabling a device- level communication based on transactions between said plurality of processing modules (M, S), wherein at least one first processing module (M) issues at least one transaction towards at least one second processing module (S) comprising: at least one transaction abortion unit (TAU) for aborting at least one transaction issued from said first module by receiving an abort request (abt) issued by said first module (M), by initiating a discard of said at least one transaction to be aborted, and by issuing a response (abt_ack) indicating the success/failure of the requested transaction abortion (Jun Xu discloses and integrated circuit (figure 5.2.2.0.2) having a plurality of processing modules (Initiator, Target) and an interconnect means for coupling said plurality of processing modules and for enabling a device-level communication based on transactions between said plurality of processing modules (see at least page 140 of Jun Xu), wherein at least one first processing module (Initiator) issues at least one transaction towards at least one second processing module (Target) comprising: at least one transaction abortion unit such as the Abort Group as shown in Figure 5.2.2.1.2 for aborting at least one transaction issued from said first module by receiving an abort request (REQ_ABORT RAW) issued by said first module (Initiator), by initiating a discard of said at least one transaction to be aborted, and by issuing a response (ACK_ABORTALL_RAW) indicating the success/failure of the requested transaction abortion. See also pages 129-132, 142, 157, Figs. 5.2.2.02, 5.2.2.1.1, 5.2.2.1.2, and description thereof).

With regard to claim 2, it is clear that Jun Xu also discloses at least one network interface (NI) associated to one of said plurality of processing modules (M, S), for controlling the communication between said one of said plurality of processing modules (M, S) and said interconnect (N), wherein said at least one transaction abortion unit (TAU) is arranged in one of said network interfaces (NI) (see pages 129-132, 157 Figs. 5.2.2.02, 5.2.2.1.1, 5.2.2.1.2, and description thereof).

With regard to claim 3, it is clear from Jun Xu and discussion above that at least one transaction abortion unit (TAU) is adapted to perform said at least one transaction abortion atomically or partially.

With regard to claims 7 and 8, see discussion above, since the subject matter represented by claims 7 and 8 has already been addressed.

Allowable Subject Matter

Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dang whose telephone number is 571-272-3626. The examiner can normally be reached on Monday-Friday from 9:AM to 5:PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Khanh Dang/

Primary Examiner, Art Unit 2111